

US-PAT-NO: 6166765
DOCUMENT-IDENTIFIER: US 6166765 A
TITLE: Electronic imaging apparatus selecting an operating mode responsive to the condition of a lens barrier assembly
DATE-ISSUED: December 26, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
 Toyofuku; Toshiyuki Hachioji N/A N/A JP

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US-CL-CURRENT: 348/220.1, 348/333.01

ABSTRACT:

In an electronic still camera has a lens barrier, a mode switching instruction for switching a photography mode, in which an image signal representing an object image fetched by a photographic lens unit is output as a video signal by an image signal processing unit, and a reproduction mode, in which a reproduced signal processing unit is operated to supply the video signal to an LCD monitor, is issued on the basis of an output of a barrier switch to be turned on or off responsive to an opening or closing movement made by the lens barrier. Thus, a user-friendly electronic imaging apparatus enabling ready selection of the photography mode or reproduction mode can be provided.

4 Claims, 27 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 20

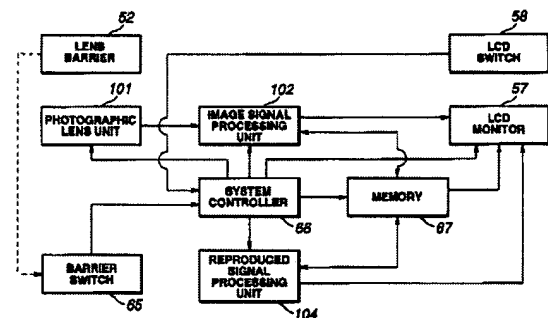
Abstract Text - ABTX (1):

In an electronic still camera has a lens barrier, a mode switching instruction for switching a photography mode, in which

United States Patent (19)
 Toyofuku

US 6166765 A
 Patent Number: 6,166,765
 Date of Patent: Dec. 26, 2000

[54] ELECTRONIC IMAGING APPARATUS SELECTING AN OPERATING MODE RESPONSIVE TO THE CONDITION OF A LENS BARRIER ASSEMBLY
 FOREIGN PATENT DOCUMENTS
 5328,965 10/1998 Rodriguez et al. 348/231
 40833486A 10/1994 Japan HDAN 5/233
 [73] Inventor: Toshiyuki Toyofuku, Hachioji, Japan
 [75] Assignee: Olympus Optical Co., Ltd., Tokyo, Japan
 [21] Appl. No.: 08/790,796
 [22] Filed: Aug. 8, 1997
 [30] Foreign Application Priority Data
 Aug. 12, 1996 [JP] Japan 9-212791
 [51] Int. Cl. HDAN 5/233; HDAN 5/222
 [52] U.S. Cl. 348/220; 348/333
 [53] Field of Search 348/220, 231, 348/333, 335, 375, 241; 366/117, 366/206, 374, 446; HDAN 5/233
 [56] References Cited
 U.S. PATENT DOCUMENTS
 4,862,377 6/1995 Thompson 348/375
 4 Claims, 20 Drawing Sheets



U	1	Document ID	Issue Date	Pages	Title
52	<input type="checkbox"/>	US 6166765 A	20001226	30	Electronic imaging apparatus selecting an operating mode
53	<input checked="" type="checkbox"/>	US 6067116 A	20000523	29	Digital camera

Claim 4

US-PAT-NO: 4451130
DOCUMENT-IDENTIFIER: US 4451130 A
See image for Certificate of Correction
TITLE: Disc camera with handle grip cover
DATE-ISSUED: May 29, 1984

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Yan; Chan K. North Point N/A N/A HK

US-CL-CURRENT: 396/424, 396/336, 396/448, 396/503, 396/541

ABSTRACT:

In a camera adapted to receive a disc-shaped magazine and including a housing with front and rear walls having a lens window exposed on the front wall near one side margin of the housing and front and rear viewfinder windows exposed on the front and rear walls on the same side of the housing as the lens window, a hollow handle is provided having spaced front and rear walls defining therebetween an open housing side-receiving recess. The handle is much narrower than the width of the housing so as to fit over only the side of the housing containing the lens and viewfinder windows. The handle is mounted on the housing for movement between a stable, releasable retracted position where the handle recess receives the latter side of the housing therein so that the front and rear handle walls cover the lens, and front and rear viewfinder windows, and at least one stable, releasable extended position where the handle projects downwardly and laterally outwardly where it can be readily grasped by the hand corresponding to the side of the camera where the lens window is located, so that the user cannot conveniently grasp the adjacent side of the housing inadvertently to cover the lens window near the margin thereof.

9 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Details Text Image HTML CI-Abstract-KWIC

U	Document ID	Issue Date	Pages	Title
<input type="checkbox"/>	US 4451130 A	19840529	12	Disc camera with handle grip cover
<input checked="" type="checkbox"/>	US 4075642 A	19780221	10	Photographic implement

Details Text Image HTML

United States Patent (19)

(11) 4,451,130

Yan

(45) May 29, 1984

(54) DISC CAMERA WITH HANDLE GRIP COVER

Attorney, Agent, or Firm—Wallenstein, Wagner, Harris, Strampel & Aubel

(73) Inventor: Chan K. Yan, North Point, Hong Kong

(57) ABSTRACT

(75) Assignee: W. Hisking Enterprises Limited, Hong Kong, Hong Kong

In a camera adapted to receive a disc-shaped magazine and including a housing with front and rear walls having a lens window exposed on the front wall near one side margin of the housing and front and rear viewfinder windows exposed on the front and rear walls on the same side of the housing as the lens window, a hollow handle is provided having spaced front and rear walls defining therebetween an open housing side-receiving recess. The handle is much narrower than the width of the housing so as to fit over only the side of the housing containing the lens and viewfinder windows. The handle is mounted on the housing for movement between a stable, releasable retracted position where the handle recess receives the latter side of the housing therein so that the front and rear handle walls cover the lens, and front and rear viewfinder windows, and at least one stable, releasable extended position where the handle projects downwardly and laterally outwardly where it can be readily grasped by the hand corresponding to the side of the camera where the lens window is located, so that the user cannot conveniently grasp the adjacent side of the housing inadvertently to cover the lens window near the margin thereof.

(21) Appl. No.: 348,328

(22) Filed: Jan. 4, 1983

(31) Int. Cl.: G03B 37/00

(32) U.S. Cl.: 354/25; 354/121; 354/268

(51) Field of Search: 354/11, 12, 201, 131; 354/268, 352/343

References Cited

U.S. PATENT DOCUMENTS

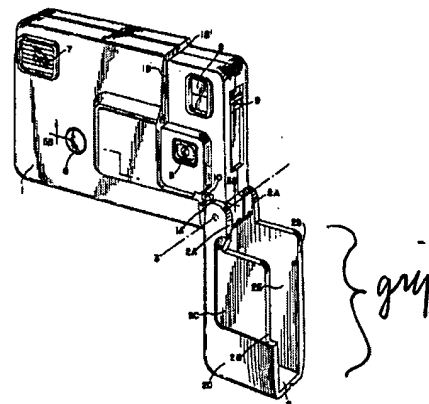
3,388,329 4/1971 Hochstein 354/121 X
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4,075,643 2/1978 Niggeloh 354/268

FOREIGN PATENT DOCUMENTS

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3228028 7/1980 United Kingdom

Primary Examiner—John Gonzalez

9 Claims, 8 Drawing Figures



Claim 1

Claim 2 - grip

camera lens, which will obviously prevent the taking of a satisfactory picture.

Brief Summary Text - BSTX (5):

In accordance with one of the features of the present invention, a camera handle is provided which is uniquely designed and related to the camera housing so that when it is in its extended position it is in a position only to be gripped by the user's left hand, so that the user is forced to place his right hand in the most convenient housing gripping position where it is cupped around the right side of the camera. A related specific feature of this aspect of the invention is that the handle of the camera in its extended position is so related to the camera housing that the user would automatically grip the handle rather than the left side of the camera housing, which he cannot conveniently grip because of the placement of the handle in a position projecting both laterally outwardly as well as laterally downwardly from the left side of the camera housing.

Drawing Description Text - DRTX (3):

FIG. 2 is a perspective view of the camera with the handle-cover fully extended to serve as a hand grip for the user's left hand;

Detailed Description Text - DETX (5):

The front side wall portion 2C of the handle 2 covers the picture taking lens 5 when the handle is in its closed position. Side wall portions 2D and 2E of the handle then also cover the front and rear windows 8 of the viewfinder. It will also be noted that, whereas the picture-taking lens 5 and the viewfinder 8 are completely shielded from dust when the hand grip 2 is in the closed position, a shutter release button 6 and a built-in flash 7 remain exposed.

Detailed Description Text - DETX (7):

The handle 2 is preferably sufficiently large to serve as a convenient hand grip when deployed to its opened or extended position. Also, because of its thin-walled construction, it adds very little overall bulk to the camera when it is in its closed position. Also, in its fully extended position it projects both

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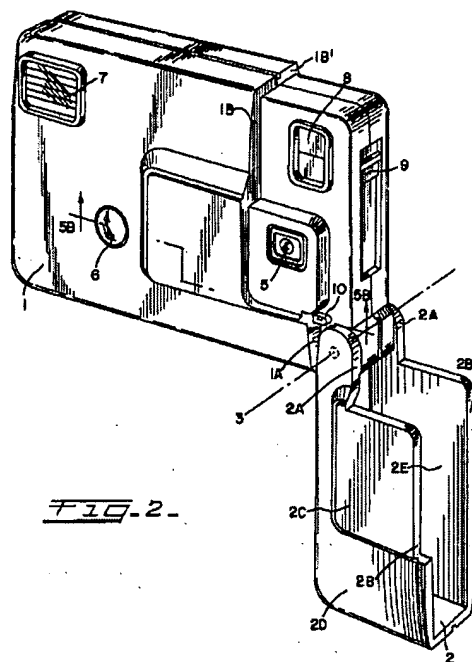


FIG. 2-

Details Text Image HTML OT Abstract KWIC

U.S. Pat.	Document ID	Issue Date	Pages	Title
1	US 4451130 A	19840529	12	Disc camera with handle grip cover

Details Text Image HTML Full

claim 2 grip.